



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,082	07/22/2004	Nils Cornelis Sips	7393/8-4061	8981
42798 7590 07/07/2009 FITCH, EVEN, TABIN & FLANNERY P. O. BOX 18415 WASHINGTON, DC 20036				
EXAMINER STULIL, VERA				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
07/07/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/502,082

Applicant(s)

SIPS ET AL

Examiner

VERA STULII

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9, 16-18 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) 8, 10-11, 14, 15, 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, 16-18 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/22/2009 has been entered.

Claim Objections

Claim 22 is objected to because of the following informalities: claim 22 depends from claim 8 which has been withdrawn. Appropriate correction is required (for example, rewriting a dependent claim in independent form).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 9, 16-18 and 21-24 are rejected under 35 U.S.C. 103(a) as being obvious over Kettlitz et al in view of Daenzer-Alloncle et al (6,139,896).

In regard to claims 1 and 7, Kettlitz et al disclose heat stable high viscosity starches (Abstract). Further in this regard Kettlitz et al disclose that "the starches of the present invention are obtained by reacting high viscosity starch with activated chlorine under alkaline conditions" and "[t]he starches of the present invention are used to replace viscosity stable starches obtained by conventional chemical cross-bonding" (Col. 1 lines 3-8). Kettlitz et al disclose that high viscosity starches are starches which

show an important increase in viscosity characteristics upon heating, starches with a high swelling power are those derived from waxy varieties and starches derived from tubers and roots (e.g. potato, tapioca) (Col. 1 lines 20-26). Kettlitz et al disclose that the swollen granules burst to a large extent during heating which leads again to a drastic viscosity breakdown. Kettlitz et al disclose that in order to overcome the undesirable viscosity breakdown starches may be stabilized (Col. 1 lines 20-26). The viscosity breakdown can be overcome by treating the starch granules with chemical reagents (Col. 1 lines 28-30). Kettlitz et al disclose that highly swollen (viscous) cooking stable starches are used in many different applications, for example in the preparation of soups, sauces, meat products, dressings, micro-wavable food and in the preparation of bakery creams and fillings, in convenience foods that need to have a high viscosity and smooth texture after heating (to 80-100°C) (Col. 1 lines 46-50). Kettlitz et al disclose that stabilized high viscosity starches are particularly suitable for the mentioned applications (Col. 1 lines 51-53).

In regard to claims 1-7, 16-18 and 21-24, Kettlitz et al disclose stabilized starch n-alkenyl succinate (Col. 2 lines 55-56).

In regard to claims 3 and 16, Kettlitz et al disclose stabilized starch n-octenyl succinate (Col. 2 lines 56-57).

In regard to claims 4 and 5, Kettlitz et al disclose that all starches can be used to prepare the stabilized starch n-octenyl succinate (Col. 3 lines 46-48).

In regard to claims 6 and 7, Kettlitz et al disclose soups, sauces, meat products, dressings, micro-wavable food, bakery creams and fillings (Col. 1 lines 46-50).

Kettlitz et al do not specifically disclose UHT treatment of the food products. However, Kettlitz et al disclose use of stabilized starch n-alkenyl succinate in the food products that normally undergo UHT/high-temperature/sterilization/ pasteurization treatment.

In regard to claims 1, 7, 17 and 18, Daenzer-Alloncle et al disclose a lactic cream which has been treated by an ultra-high temperature ("UHT") treatment or other sterilization procedure or by pasteurization to provide a cream product for unrefrigerated storage and which contains between 1.5 and 4% by weight of modified starch for controlling viscosity, so that the composition has a viscosity between 250 and 1600 mPas (Abstract).

In regard to claim 24, Kettlitz et al disclose that highly swollen (viscous) cooking stable starches are used in many different applications, for example in the preparation of soups, sauces, meat products, dressings, micro-wavable food and in the preparation of bakery creams and fillings, in convenience foods that need to have a high viscosity and smooth texture after heating (to 80-100°C) (Col. 1 lines 46-50). Kettlitz et al disclose use of stabilized starch n-alkenyl succinate in the food products that normally undergo UHT/high-temperature/sterilization/ pasteurization treatment and reheated for further consumption (soups, sauces, meat products, dressings, micro-wavable food, creams and fillings).

Since Daenzer-Alloncle et al disclose use of modified starch as a viscosity component in a cream product that undergoes heat treatment, and Kettlitz et al disclose use of heat stable high viscosity starches in preparation of cream products, one of

ordinary skill in the art would have been motivated to employ heat stable high viscosity starches in preparation of cream products as taught by Daenzer-Alloncle et al. One of ordinary skill in the art would have been motivated to do so, since both Kettlitz et al and Daenzer-Alloncle et al. disclose use of modified starch as a viscosity component; foods that undergo UHT/high-temperature/sterilization/ pasteurization treatment; and the importance of heat stability of starches.

Regarding particular viscosity recitations after re-heating in claims 1, 2, 5, 7 and 21, 13 and 24 it is noted that although the references do not specifically disclose every possible quantification or characteristic of its product, such as viscosity after re-heating, this characteristic would have been expected to be in the claimed range absent any clear and convincing evidence and/or arguments to the contrary. The combination of references disclose the same starting materials and methods as instantly (both broadly and more specifically) claimed, and thus one of the ordinary skill in the art would recognize that the viscosity after re-heating, among many other characteristics of the product obtained by referenced method, would have been an inherent result of the process disclosed therein. The Patent Office does not possess the facilities to make and test the referenced method and product obtain by such method, and as reasonable reading of the teachings of the references has been applied to establish the case of obviousness, the burden thus shifts to applicant to demonstrate otherwise.

Response to Arguments

On page 7 of the Reply to the Office action mailed January 8, 2009, Applicants request rejoinder of claim 22. It is noted that claim 22 has been rejoined and rejected in the previous Office action (see Office action ailed January 8, 2009).

Applicant's arguments filed April 22, 2009 regarding the rejection under 35 U.S.C. 103(a) have been fully considered but they are not persuasive.

On page 9 of the Reply Applicants state that:

Applicants courteously submit the references do not teach the present inventions, would not have been combined, and furthermore even if, *arguendo*, they were combined the elected claimed inventions would have been unobvious to a person of ordinary skill in the art.

First, the primary reference, Kettlitz '894, actually discloses stabilized starches that only maintain/retain their pre-existing viscosity even after reheating. That is the antithesis of the claimed inventions. Kettlitz would not have suggested an increase in Viscosity as recited in the pending claims.

Examiner respectfully disagrees. As stated by Applicants in the specification "[for] obtaining the stabilized starch n-alkenyl succinate, the starch n-alkenyl succinate can be treated with active chlorine and can be prepared according to the process described in EP 0811633". Thus Applicants admit that the starches used in the present inventions can be prepared according to the process described in EP 0811633. It is further noted that EP 0811633 was also published as US 6,235,894, which is used as a main reference in the instant rejection. Therefore, it is not seen how Kettlitz '894 teaches away from the presently claimed invention, when in fact, Kettlitz '894 disclose the same starches as claimed by Applicants.

On page 8 of the Reply, Applicants state that "[t]he prior art does not teach "a UHT-treated product comprising a stabilized starch n-alkenyl succinate as a texturizing agent..." On pages 10 and 11 of the Reply, Applicants state that Kettlitz '894 does not disclose UHT-treated food products. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As stated in the Office action mailed July 11, 2008 and above, Kettlitz '894 disclose the same starches as claimed by Applicants. Kettlitz et al disclose that highly swollen (viscous) cooking stable starches are used in many different applications, for example in the preparation of soups, sauces, meat products, dressings, micro-wavable food and in the preparation of bakery creams and fillings, in convenience foods that need to have a high viscosity and smooth texture after heating (to 80-100°C) (Col. 1 lines 46-50). Kettlitz et al disclose that stabilized high viscosity starches are particularly suitable for the mentioned applications (Col. 1 lines 51-53). Kettlitz et al disclose stabilized starch n-alkenyl succinate (Col. 2 lines 55-56) and stabilized starch n-octenyl succinate (Col. 2 lines 56-57). Kettlitz et al disclose soups, sauces, meat products, dressings, micro-wavable food, bakery creams and fillings (Col. 1 lines 46-50). Kettlitz et al do not specifically disclose UHT treatment of the food products. However, Kettlitz et al disclose use of stabilized starch n-alkenyl succinate in the food products that normally undergo UHT/high-temperature/sterilization/ pasteurization treatment. Daenzer-Alloncle et al disclose a lactic cream which has been treated by an

ultra-high temperature ("UHT") treatment or other sterilization procedure or by pasteurization to provide a cream product for unrefrigerated storage and which contains between 1.5 and 4% by weight of modified starch for controlling viscosity, so that the composition has a viscosity between 250 and 1600 mPas (Abstract). Since Daenzer-Alloncle et al disclose use of modified starch as a viscosity component in a cream product that undergoes heat treatment, and Kettlitz et al disclose use of heat stable high viscosity starches in preparation of cream products, one of ordinary skill in the art would have been motivated to employ heat stable high viscosity starches in preparation of cream products as taught by Daenzer-Alloncle et al. One of ordinary skill in the art would have been motivated to do so, since both Kettlitz et al and Daenzer-Alloncle et al. disclose use of modified starch as a viscosity component; foods that undergo UHT/high-temperature/sterilization/ pasteurization treatment; and the importance of heat stability of starches.

On pages 8 and 11 of the Reply, Applicants state that "[t]he prior art does not teach "wherein, after UHT-treatment, said UHT-treated product has a viscosity between 0.10 to 0.50 times the viscosity obtainable after re-heating of said UHT-treated product." Further, in response to Applicants' arguments regarding inherency on pages 12-15 of the reply, it is noted that regarding particular viscosity recitations after re-heating in claims 1, 2, 5, 7 and 21, 23-24, although the references do not specifically disclose every possible quantification or characteristic of its product, such as viscosity after re-heating, this characteristic would have been expected to be in the claimed range absent any clear and convincing evidence and/or arguments to the contrary. The

combination of references disclose the same starting materials and methods as instantly (both broadly and more specifically) claimed, and thus one of the ordinary skill in the art would recognize that the viscosity after re-heating, among many other characteristics of the product obtained by referenced method, would have been an inherent result of the process disclosed therein. The Patent Office does not possess the facilities to make and test the referenced method and product obtain by such method, and as reasonable reading of the teachings of the references has been applied to establish the case of obviousness, the burden thus shifts to applicant to demonstrate otherwise.

On page 10 of the Reply, Applicants state that Daenzer-Allonde '896 refers to fluid lactic creams, and those who are skilled in the art understand that such fluid lactic creams are consumed "as is" after a UHT treatment, and thus there would have been no reason to reheat a fluid lactic cream, nor a reason to increase its viscosity thickening effect) after heating the already UHT food product. In response to this argument, it is noted that Daenzer-Allonde et al is relied upon as a teaching of use of modified starch as a viscosity controlling component in a cream product that undergoes ultra-high temperature ("UHT") treatment. Product as disclosed by Kettlitz (soups, sauces, meat products, dressings, micro-wavable foods, bakery creams and fillings) were well known to be reheated again before consumption. Therefore, the change in the viscosity after re-heating is the inherent result of the use of the starch n-alkenyl succinate as texturizing agents in these products absent any clear and convincing evidence and/or arguments to the contrary.

In response to applicant's argument that the references do not teach change in viscosity after reheating, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

On page 11 of the Reply, Applicants state that "Daenzer-Alloncle '896 refers a viscosity of 250 to 1600 mPas, whereas Applicants' claim 7 states that after UHT treatment, the viscosity is less than 1500 mPas, but after reheating it is above 2000 mPas". In response to this argument, it is noted that teaching in Daenzer-Alloncle of a viscosity of 250 to 1600 mPas meets the recited limitation of "less than 1500 mPas".

On page 12 of the Reply, Applicants state that "Kettlitz '894 additionally does not disclose reheating a UHT-treated food product". In response to this argument, it is noted that product as disclosed by Kettlitz (soups, sauces, meat products, dressings, micro-wavable foods, bakery creams and fillings) were well known to be reheated again before consumption. Therefore, the change in the viscosity after re-heating is the inherent result of the use of the starch n-alkenyl succinate as texturizing agents in these products absent any clear and convincing evidence and/or arguments to the contrary.

In summary to the arguments presented it is noted that:

- Products containing starch n-alkenyl succinate as texturizing agents were well known in the art (see Kettlitz '894);
- Among the products containing starch n-alkenyl succinate as texturizing agents were soups, sauces, meat products, dressings, micro-wavable

foods, bakery creams and fillings, and convenience foods that need to have a high viscosity and smooth texture after heating (see Kettlitz '894).

Therefore, Kettlitz et al disclose use of stabilized starch n-alkenyl succinate in the food products that normally undergo UHT/high-temperature/sterilization/ pasteurization treatment.

- Daenzer-Allonde et al is relied upon as a teaching of use of modified starch as a viscosity controlling component in a cream product that undergoes ultra-high temperature ("UHT") treatment.
- Product as mentioned above (soups, sauces, meat products, dressings, micro-wavable foods, bakery creams and fillings) were well known to be reheated again before consumption. Therefore, the change in the viscosity after re-heating is the inherent result of the use of the starch n-alkenyl succinate as texturizing agents in these products absent any clear and convincing evidence and/or arguments to the contrary.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VERA STULII whose telephone number is (571)272-3221. The examiner can normally be reached on 7:00 am-3:30 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

VS

/KEITH D. HENDRICKS/
Supervisory Patent Examiner, Art Unit 1794